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EXAMINER

DARNO, PATRICK A

ART UNIT PAPER NUMBER

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/643,815	Applicant(s) DITTMAR ET AL.	
	Examiner Patrick A. Damo	Art Unit 2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>02072006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-12 are pending in this office action.

Claim Objections

2. Claim 7 is objected to because they include reference characters which are not enclosed within parentheses.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-2, 5-6, 8, and 11-12 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 1, 5, 8, and 11-12, the claims contain the indefinite terminology "and/or". This terminology renders the claim indefinite because it means that either a) both of the limitations connected with it are part of the applicant's invention or either one of the limitations connected with it are part of the applicant's invention. The applicant is required to particularly point out and distinctly claim the invention. Because of the indefinite nature of the terminology "and/or", the examiner assumes that

the "and/or" is actually just "or" for the remainder of this office action. The applicant is required to correct the ambiguous meaning that results from the "and/or" terminology in order to overcome this rejection.

Claim 2 provides for the use of "process data ", but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced. Appropriate correction is required.

Claim 6 is rejected because it inherits the deficiencies of claim 5.

Claim Rejections - 35 USC § 101

Claim 2 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,983,232 issued to Tuan Nguyen et al. (hereinafter

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“Nguyen”) in further view of U.S. Patent Application Publication Number 2001/0034592 issued to Peter Q. Herman (hereinafter “Herman”).

Claim 1:

Nguyen discloses a method for simulating process flows and for displaying the result calculated in the simulated process flows and/or intermediate results, comprising the steps of:

inputting and/or selecting at least one order data set (Nguyen: column 2, lines 51-58 and column 3, lines 14-18 and column 2, lines 34-39; Note that there are “acceptance test” conditions and measurements of throughput and yield. The acceptance test is the order data set. And the measure of throughput and yield is the result of how the configured process flow responds to the input test conditions. Also note column 3, lines 17-18, “values may be read into the template”. This is inputting an order data set (which is actual test data) into a process data set. This creates a link as described below.);

inputting and/or selecting at least one process data set (Nguyen: column 5, lines 52-61 and column 11, lines 12-19; The Designer Elements (also referred to as designer objects) are the process data sets. This is because the Designer Elements are stored models of actual machines. So by selecting a particular Designer Element, you select a particular machine. This is exactly the applicant’s definition of process data sets presented in applicant’s specification paragraph [0011], lines 1-7.);

calculating links between the order data set and the process data set as a function of the order data set and the process data set (Nguyen: column 3, lines 14-18; The calculating of links according to the applicant is simply the process data (or machine device or design object) interacting with the input order data set (or print job or “acceptance test”) allowing for a simulation based on the two sets of data to occur. This definition is found in the applicant’s specification in paragraph [0009], lines 1-4. This is what occurs in the Nguyen reference specifically on line 17-18

when it states “values may be read into the template to create the simulation object. So prior to the actual simulation, there is the device objects (process data) and input values (order data set or “acceptance test”) and after they are both combined, the result is a linkage that allows the simulation to occur.);

creating a process flow from the calculated links (Nguyen: column 8, lines 63 – column 9, line 4 and column 9, lines 23-27; Note that the simulation objects are built in here and in column 3, lines 14-18. These simulation objects are built as described above as a result of linking the process data and the order data. The simulation is then created from the simulation objects. The simulations carried out in the Nguyen reference are of assembly lines (process flow) of machine objects (column 11, lines 12-24). The simulation of the assembly line objects (process flow) cannot be carried out without first creating the simulation objects (links between process data and order data). Therefore the process flow (assembly line simulation) is in fact created from the calculated links (simulation objects).);

calculating a result and/or intermediate results for the process flow using the order data set (Nguyen: column 3, lines 4-20; After the simulator runs the order data set (“values read into the template (process data or design objects)), performance results from the simulations are sent to the reporting means.); and

outputting the result and/or intermediate results (Nguyen: column 3, lines 22-25 and column 9, lines 28-43).

The process flow simulation method set forth by Nguyen discloses configuring objects that represent assembly line (process flow) equipment to model tasks such as processes using electrical components, manufacturing processes, and other assembly processes using parameters characterizing the operation of the given object or process (Nguyen: column 2, line 59 - column 3, line 11 and column 5, lines 45-46; Note specifically that in these two references Nguyen suggests using the simulation of process flows with respect to different types of

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objects (machinery) and different types of assembly and manufacturing processes.). Furthermore, the simulation method set forth by Nguyen uses this assembly line simulation to reduce the time and costs involved with the production of an assembly line (Nguyen: column 15, line 63 – column 16, lines 17). However, Nguyen does not explicitly disclose wherein the simulation method to reduce time and costs is in the graphics industry.

Herman also discloses a simulation method designed to save the time and cost incurred from using actual machinery (Herman: paragraph [0006], lines 4-9). Furthermore, Herman discloses wherein the simulation method is in the graphics industry (Herman: entire abstract and paragraph [0006]). It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teachings of Nguyen with the teachings of Herman noted above for the purpose of creating a simulation method designed to reduce the time and cost incurred using actual machinery (Herman: paragraph [0006], lines 4-9). The skilled artisan would have been motivated to improve the teachings of Nguyen per the above in order to create a computer model using printing presses to simulate a printing process without incurring the time and expense of using an actual printing press (Herman: paragraph [0006], lines 1-9 and Nguyen: column 16, lines 16-17).

Claim 2:

The combination of Nguyen and Herman discloses all the elements of claim 1, as noted above, and Nguyen further discloses wherein the calculating of the links between the order data set and the process data set includes an evaluation method, the evaluation method including making a query as to which process data set can be used to process an input or selected order data set of the at least one process data set so as

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to define positively queried process data sets (Nguyen: column 8, line 63-column 9, line 1; The process data sets (designer objects) are queried from the spreadsheet.); writing the positively queried process data sets to a resource table (Nguyen: column 9, lines 1-2; The data returned from the spreadsheet is placed in the Transfer File.); establishing ranking of the positively queried process data sets as a function of the process flow data and the order data set; selecting the process data set with a highest ranking; and assigning the process data set with the highest ranking to the selected order data set (Nguyen: column 9, lines 1-4; The process data extracted from the spreadsheet and place in the resource table (transfer file) in order to create the simulation objects. The simulation objects, as noted above, are the result of a link between the process data set and the order data set.).

Claim 3:

The combination of Nguyen and Herman discloses all the elements of claim 1, m as noted above, and Nguyen further discloses wherein the calculating of the links between order data set and process data set includes a further method, the further method including sequentially assigning one of the order data sets of the at least on order data sets to one or more of the process data sets; comparing the order data sets and the assigned process data sets to each other; and in each case creating a best linkage as a function of the order data set (Nguyen: column 3, lines 4-8 and column 8, lines 63-column 9, line 4).

Claim 4:

The combination of Nguyen and Herman discloses all the elements of claim 1, as noted above, and Herman further discloses wherein the order data set contains data

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needed for the printing job (Herman: paragraph [0050], lines 1-4; An order data set as defined in applicants specification is simply a stored print job that can be used as an input to a simulation. This is exactly what is disclosed in the Herman reference cited above.).

Claim 5:

The combination of Nguyen and Herman discloses all the elements of claim 1, as noted above, and Herman further discloses wherein the process data set contains performance specifications and/or operating costs of a device of the graphics industry needed for the process flow (Herman: paragraph [0052], lines 1-5 and paragraph [0053], lines 10-12 and Figs. 17 and paragraph [0058] and Fig. 20; The first reference shows that the process data set selected is actually a printing press (which is a device in the graphics industry). The second reference deals with the adjusting of settings of the printing press (process data set). Since the settings can be adjusted, there must be a default setting. And these default settings are performance specifications and operating costs dealing with the printing press.).

Claim 6:

The combination of Nguyen and Herman discloses all the elements of claim 5, as noted above, and Herman further discloses wherein the device is a printing press or a prepress device (Herman: paragraph [0052], lines 1-5; This reference cites allowing the user to select a type of printing press.).

Claim 7:

The combination of Nguyen and Herman discloses all the elements of claim 1, as noted above, and Nguyen further discloses wherein prior to the start of the method, it is possible to access at least one process data set stored in a library 12 (Nguyen: column 11, lines 12-19; Note that the process data (design element) is stored in a library (database). Further the

reference says a user can access the process data (design element) by “selecting” it from the library (database).).

Claim 8:

The combination of Nguyen and Herman discloses all the elements of claim 1, as noted above. Nguyen does not explicitly disclose wherein prior to inputting and/or selecting steps, access to the at least one order data set stored in a library is provided. However, Herman further discloses wherein prior to inputting and/or selecting steps, access to the at least one order data set stored in a library is provided (Herman: paragraph [0044], lines 15-25 and Fig. 20 and Fig. 9, 96 and Fig. 25; The stored order data sets (print jobs or “libraries of print images and production problems”) can be accessed (viewed) prior to selecting which one will be used for the actual simulation.).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the previously mentioned combination with the further teachings of Herman noted above for the purpose of allowing a user to view stored print jobs that could be used in a simulation (Herman: paragraph [0044], lines 15-19; The training exercises are previously stored print jobs (see paragraphs [0050]-[0051]). And the training exercises are made available through the user interface shown in Fig. 20.). The skilled artisan would have been motivated to improve the previously mentioned combination per the above such that print jobs that had caused problems when executed with an old printing press configuration could easily be executed again with a new printing press configuration allowing the user to figure out how to correct the problem (Herman: paragraph [0044], lines 15-19).

Claim 9:

The combination of Nguyen and Herman discloses all the elements of claim 1, as noted above, and Nguyen further discloses wherein the process data sets are stored and can be selected and called up from the library on a display device with the aid of a graphical user interface (Nguyen: Fig. 2 and Fig. 6 and column 7, lines 41-47).

Claim 10:

The combination of Nguyen and Herman discloses all the elements of claim 1, as noted above, and Herman further discloses wherein the order data sets can be selected and called up from a library on a display device with the aid of a graphical user interface (Herman: paragraph [0044], lines 15-25 and Fig. 20 and Fig. 9, 96 and Fig. 25; The stored order data sets (print jobs or “libraries of print images and production problems”) can be called up (viewed) and selected with the aid of the graphical user interfaces shown in the cited figures above.).

Claim 12:

Nguyen discloses a device for simulating process flows and for displaying the result calculated in the simulated process flows and/or intermediate results on a display device, comprising:

at least one user interface for inputting and/or selecting at least one order data set (Nguyen: column 2, lines 51-58 and abstract and column 3, lines 14-18 and column 2, lines 34-39; Note that there are “acceptance test” conditions and measurements of throughput and yield. The acceptance test is the order data set. And the measure of throughput and yield is the result of how the configured process flow responds to the input test conditions. Also note lines 17-18, “values may be read into the template”. This is inputting an order data set (which is actual test data) into a process data set. This creates a link as described below.);

at least one user interface for inputting and/or outputting at least one process data set ; (Nguyen: column 5, lines 52-61 and column 11, lines 12-19; The Designer Elements (also referred to as designer objects) are the process data sets. This is because the Designer Elements are stored models of actual machines. So by selecting a particular Designer Element, you select a particular machine. This is exactly the applicant's definition of process data sets presented in applicant's specification paragraph [0011], lines 1-7.);

at least one device suitable for calculating links between order data set and process data set as a function of the order data set and the process data set (Nguyen: column 3, lines 14-18; The calculating of links according to the applicant is simply the process data (or machine device or design object) interacting with the input order data set (or print job or "acceptance test" or "values read into template") allowing for a simulation based on the two sets of data to occur. This definition is found in the applicant's specification in paragraph [0009], lines 1-4. This is what occurs in the Nguyen reference specifically on line 17-18 when it states "values may be read into the template to create the simulation object. So prior to the actual simulation, there is the device objects (process data) and input values (order data set or "acceptance test") and after they are both combined, the result is a linkage that allows the simulation to occur.);

at least one device suitable for creating a process flow from the calculated links (Nguyen: column 8, lines 63 – column 9, line 4 and column 9, lines 23-27; Note that the simulation objects are built in here and in column 3, lines 14-18. These simulation objects are built as described above as a result of linking the process data and the order data. The simulation is then created from the simulation objects. The simulations carried out in the Nguyen reference are of assembly lines (process flow) of machine objects (column 11, lines 12-24). The simulation of the assembly line objects (process flow) cannot be carried out without first creating the simulation objects (links between process data and

order data). Therefore the process flow (assembly line simulation) is in fact created from the calculated links (simulation objects.);

at least one device suitable for calculating the result and/or intermediate results for the process flow using the order data set (Nguyen: column 3, lines 4-20; After the simulator runs the order data set ("values read into the template (process data or design objects)), performance results from the simulations are sent to the reporting means.); and

at least one display or output device for displaying or outputting the results or intermediate results (Nguyen: column 3, lines 22-25 and column 9, lines 28-43).

The process flow simulation device set forth by Nguyen discloses configuring objects that represent assembly line (process flow) equipment to model tasks such as processes using electrical components, manufacturing processes, and other assembly processes using parameters characterizing the operation of the given object or process (Nguyen: column 2, line 59 - column 3, line 11 and column 5, lines 45-46; Note specifically that in these two references Nguyen suggests using the simulation of process flows with respect to different types of objects (machinery) and different types of assembly and manufacturing processes.). Furthermore, the simulation method set forth by Nguyen uses this assembly line simulation to reduce the time and costs involved with the production of an assembly line (Nguyen: column 15, line 63 – column 16, lines 17). However, Nguyen does not explicitly disclose wherein the simulation device to reduce time and costs is in the graphics industry.

Herman also discloses a simulation device designed to save the time and cost incurred from using actual machinery (Herman: paragraph [0006], lines 4-9). Furthermore, Herman discloses wherein the simulation device is in the graphics industry (Herman: entire abstract and paragraph [0006]). It would have been obvious for one of ordinary skill in

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the art at the time the invention was made to modify the teachings of Nguyen with the teachings of Herman noted above for the purpose of creating a simulation device designed to reduce the time and cost incurred using actual machinery (Herman: paragraph [0006], lines 4-9). The skilled artisan would have been motivated to improve the teachings of Nguyen per the above in order to create a computer model using printing presses to simulate a printing process without incurring the time and expense of using an actual printing press (Herman: paragraph [0006], lines 1-9 and Nguyen: column 16, lines 16-17).

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen in view of Herman and further in view of U.S. Patent Application Publication Number 2003/0018542 issued to Hiroyuki Nakano et al. (hereinafter "Nakano").

Claim 11:

The combination of Nguyen and Herman discloses all the elements of claim 1, as noted above, but does explicitly disclose wherein the process data sets contain dimensions associated with graphics industry devices and/or the dimensions associated with the devices are displayed on a display device. However, Nakano discloses wherein the process data sets contain dimensions associated with graphics industry devices and/or the dimensions associated with the devices are displayed on a display device (Nakano: paragraph [0025] and Fig. 2; The specification database stores the dimensions of machines in a data set.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the previously mentioned combination with the teachings of Nakano noted above. The skilled artisan would have been motivated to improve the

previously mentioned combination per the above such that the detailed specifications of a machine could help a customer decide whether or not to purchase the machine (Nakano: abstract; The customer consults the specification of a machine before purchase and the specification includes the size of the machine. Using the size of the machine, the customer can determine if the machine (printing press) would fit in a desired place. If there is enough space, the customer would purchase the machine, if there is not enough space, the customer doesn't purchase the machine.).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick A. Darno whose telephone number is (571) 272-0788. The examiner can normally be reached on Monday - Friday, 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on (571) 272-4023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Patrick A. Darno
Examiner
Art Unit 2163

